Customer No.: 31561
Application No.: 10/710,765
Docket No.: 13505-US-PA

AMENDMENT

Please amend the application as indicated hereafter.

In the Claims :

1. (original) An electrically erasable and programmable read only memory (EEPROM) cell, comprising:

a stacking layer disposed over a substrate, wherein the stacking layer comprises a tunneling dielectric layer, a charge trapping layer and a block dielectric layer sequentially;

a gate conductive layer, disposed over the stacking layer;

a first source/ drain region and a second source/ drain region, respectively disposed on two sides of the gate conductive layer in the substrate;

a first pocket implant doping region, disposed below the stacking layer in the substrate being adjacent to the first source/ drain region; and

a second pocket implant doping region, disposed below the stacking layer in the substrate being adjacent to the second source/ drain region, and a doping concentration of the first pocket implant doping region is different from a doping concentration of the second pocket implant doping region.

2. (original) The EEPROM cell as recited in claim 1, wherein a dopant type of the first pocket implant doping region and the second pocket implant doping region is opposite to a dopant type of the first source/ drain region and a second source/ drain region.

3. (original) The EEPROM cell as recited in claim 2, wherein the dopant type of the first pocket implant doping region is P-type.

4. (original) The EEPROM cell as recited in claim 2, wherein the dopant type of the second pocket implant doping region is P-type.

5. (original) The EEPROM cell as recited in claim 2, wherein the dopant type of the first source/ drain region is N-type.

6. (original) The EEPROM cell as recited in claim 2, wherein the dopant type of the second source/ drain region is N-type.

7. (original) The EEPROM cell as recited in claim 1, wherein a material of the tunneling dielectric layer comprises silicon oxide.

8. (original) The EEPROM cell as recited in claim 1, wherein a material of the charge trapping layer comprises silicon nitride.

9. (original) The EEPROM cell as recited in claim 1, wherein a material of the blocking dielectric layer comprises silicon oxide.

10.-17. (canceled)